

Towards High Temperature Superconductivity: A Resonating Valence Bond State in Pyrochlore

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Abstract

The origin of high temperature superconductivity in the cuprates remains a major open problem in condensed matter physics. Resonating valence bond (RVB) theory, first proposed by P. Anderson in 1987 [1], provides a possible solution. The aim of this talk is to provide an informal introduction to high temperature superconductivity and the RVB theory, and present work on the existence of RVB states in models of the pyrochlore lattice.

References

- [1] P. W. Anderson. *Science* **235**, 1196 (1987).